

Work Order ID 71919

Wednesday, July 13, 2011 12:46:09 PM



Page 1

Item ID: D3281-1L08

Accept



Setup Start



Revision ID:

Item Name: Floor Protector, Fwd LH

Stop



Start Date: 7/13/2011 Start Qty: 5.00



Cust Item ID:

Required Date: 7/20/2011 Req'd Qty: 5.00



Customer:

Reference:

Approvals: Process Plan: *ME*

Date: 11-07-13

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID Tool # Plan Code Accept Qty Reject Qty Reject Number Insp. Stamp

Draw Nbr

Revision Nbr

D3281

Rev F

100

0.00



HAND FINISHING THERMOFORMING

Thermoform

Memo

0.00

Thermoforming Machine

Cut Blanks

x5

DL
11/07/15

105

0.00



Dry Material

HandThermo

Memo

0.00

Hand Finishing Thermoforming

Dry Sheet as per QSI022 POLYCARBONATE

Temp: *270°F*

Time IN: *4:30 pm 11/07/14*

Time OUT: *2:00 am 11/07/15*

x5

Sh
11/07/15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 2

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

110

0.00



THERMOFORMING MACHINE

Thermoform

Memo

0.00

Thermoforming Machine

Thermoform as per Dwg. D3281 and Folio FTA 011

Dwg. Rev. F

Folio Rev. D

120

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

130

0.00



HAND FINISHING THERMOFORMING

Thermoform

Memo

0.00

Thermoforming Machine

Trim to Finished Dimensions

x5

Wh

11/07/15

x5

Wh

11/07/15

x5

Wh

11/07/18

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Work Order ID 71919

Wednesday, July 13, 2011 12:46:09 PM



Page 3

Item ID: D3281-1L08

Revision ID:

Item Name: Floor Protector, Fwd LH

Start Date: 7/13/2011 Start Qty: 5.00

Required Date: 7/20/2011 Req'd Qty: 5.00

Reference:

Approvals: Process Plan: Date:

QC: Date:

Tooling: Date:

SPC (Y/N): Date:

Run Start

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID Tool # Plan Accept Reject Reject Insp.
Code Qty Qty Number Stamp

140

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

150

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

160

Packaging

0.00



Packaging

Memo

0.00

Packaging

Accept



Setup Start



Stop



Cust Item ID:

Customer:

x5, Dh.
4/07/18
M/ 11 07 20 (5)
11/7/21 (5X)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Work Order ID 71919

Wednesday, July 13, 2011 12:46:09 PM



Page 4

Item ID: D3281-1L08

Accept



Setup Start



Revision ID:

Item Name: Floor Protector, Fwd LH

Stop



Start Date: 7/13/2011 Start Qty: 5.00



Cust Item ID:

Required Date: 7/20/2011 Req'd Qty: 5.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

170

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/7/22
MK
11-07-21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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NOTE: Date & initial all entries

Picklist Print

Wednesday, July 13, 2011 12:46:06 PM

Page 1

Work Order ID: 71919

Parent Item: D3281-1L08

Parent Item Name: Floor Protector. Fwd LH



Start Date: 7/13/2011

Required Date: 7/20/2011

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP Rev. A 10.02.24 New Issue LL
Add Step 105 Dry Material 10/04/21 DL

IPP Rev. B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MLEXS.118-90318-08		Purchased	No			100	sf	2,044.205	5	26.31579			



Lexan Sheet

Location

Loc Qty

Loc Code

therm

2044.20578

113127

2044.20578

21,31579 sq ft

DL
11/07/18

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 21919
Description: Floor Protector, Fwd LH		Part Number: D3281-1
Inspection Dwg: D3281	Rev: F	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST
THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than 0.1875" Go/No Go	✓			
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

Measured by: <i>Whe</i>	Date: 11/07/15
--------------------------------	-----------------------

TRIMMING SECTION

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
18.6	+/-0.100	18.6"	✓			
17.1	+/-0.100	17.1"	✓			
11.7	+/-0.100	11.7"	✓			
0.95	+/-0.030	0.98"	✓			
0.25	+/-0.030	0.27"	✓			
0.030	Min	0.040"	✓			
0.070	Min	0.105"	✓			

Measured by: <i>Whe</i>	Date: 11/07/18
Audited by: <i>JB</i>	Date: 11/07/19
Preliminary Approval:	Date:

Rev	Date	Change	Revised by	Approved
A	08.02.28	New Issue	KJ/DL	
B	08.04.16	Dimensions updated per Dwg Rev D	KJ/DL	
C	08.09.12	Tolerance revised for 0.070 dimension	KJ/DL	
D	10.09.01	Dwg Rev updated	KJ	
E	11.06.21	Dwg Rev updated	KJ	<i>[Signature]</i>

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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• **NOTE:** Date & initial all entries

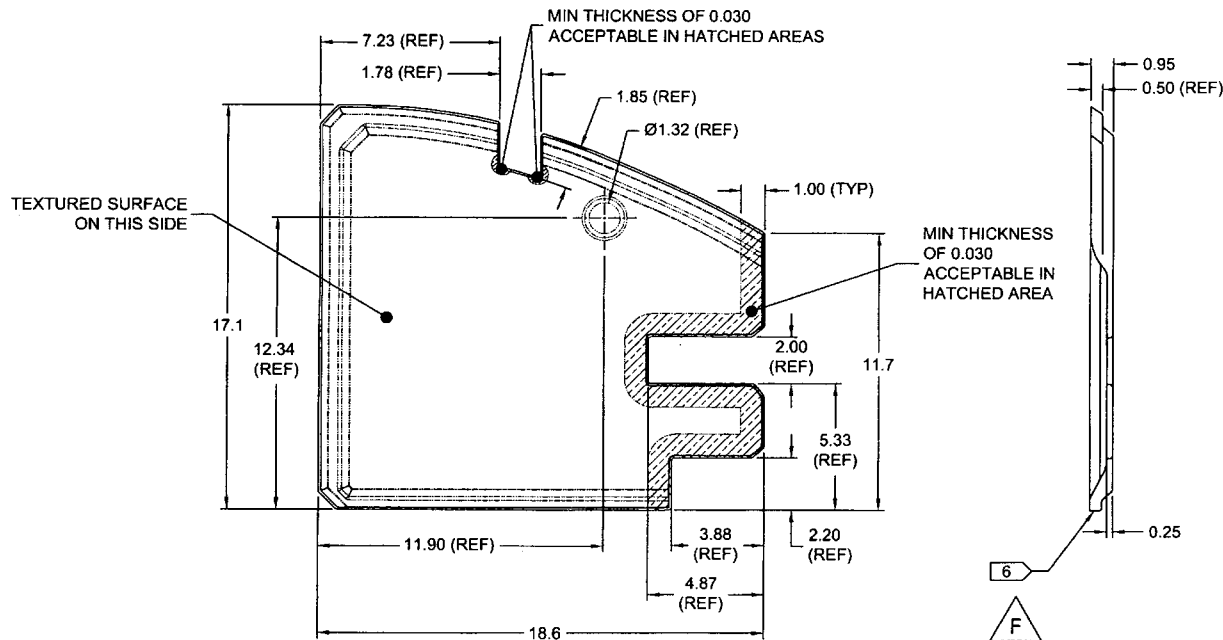
8 7 6 5 4 3 2 1

D

C

B

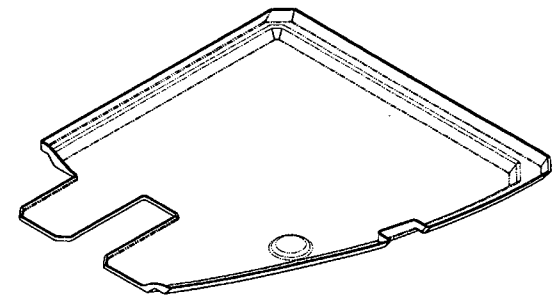
A



D3281-1 FLOOR PROTECTOR

NOTES:

- 1) MATERIAL: -1L02 = LEXAN F6006, BLACK No. 701, 0.093" THICK (MLEXS.093-F6006-02)
-1L08 = LEXAN 90318 (PROTECT-A-GLAZE), 0.118 THICK, 112-CLEAR (MLEXS.118-90318-08)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.010 MAX
- 6) IDENTIFICATION: IDENT WITH DART P/N "D3281-1Lxx" AND B/N PER QSI 044 6.4 ALONG PERIMETER OF PART AS SHOWN.
- 7) WEIGHT: D3281-1L02 = 0.95 lb D3281-1L08 = 1.13 lb
- 8) THERMOFORM WITH MOLD D3281-1T1 PER DART QSI 022; TRIM AS SHOWN
MINIMUM THICKNESS AFTER FORMING: 0.070" EXCEPT WHERE INDICATED



71919

RELEASED
2010-11-25

F	NOTES UPDATED. FLAG NOTE 6 WAS 7 & RELOC, D.E.O. D3281-E-1 INC. DIM 17.0 WAS 17.1 (ZN B5-3, B6-4) & 17.7 WAS 17.8 (ZN C5-3, C6-4) REF CAR 10-21.	JPH	10.09.27
E	-3/4 NOW TRIMMED FLAT: RMV 0.25 BEVEL TO FACILITATE TRIMMING (ZN D6-3, D4-4)	CP	10.01.05
D	THICKNESS 0.093 WAS 0.125, MIN THICKNESS 0.070 WAS 0.080, P/N AND B/N ID WITH VIBRATING STYLUS (ZN A7-1, A7-2, A7-3, A7-4); D3281-4 NOW ON PAGE 4; CORRECT WEIGHTS (ZN A8-1, A8-2, A8-3, A8-4)	PH	08.03.28
C	UPDATE DIMS TO MATCH PARTS: COLOUR 701 WAS 700; GENERAL UPDATE	LE	07.10.09
B	NOW LEXAN; DIMS AS MANUFACTURED	CP	05.11.25
A	NEW ISSUE	CP	04.05.03
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.09.27		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D3281	REV. F SHEET 1 OF 4
TITLE FLOOR PROTECTOR	SCALE NTS
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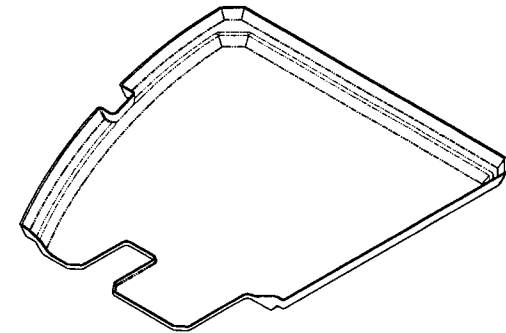
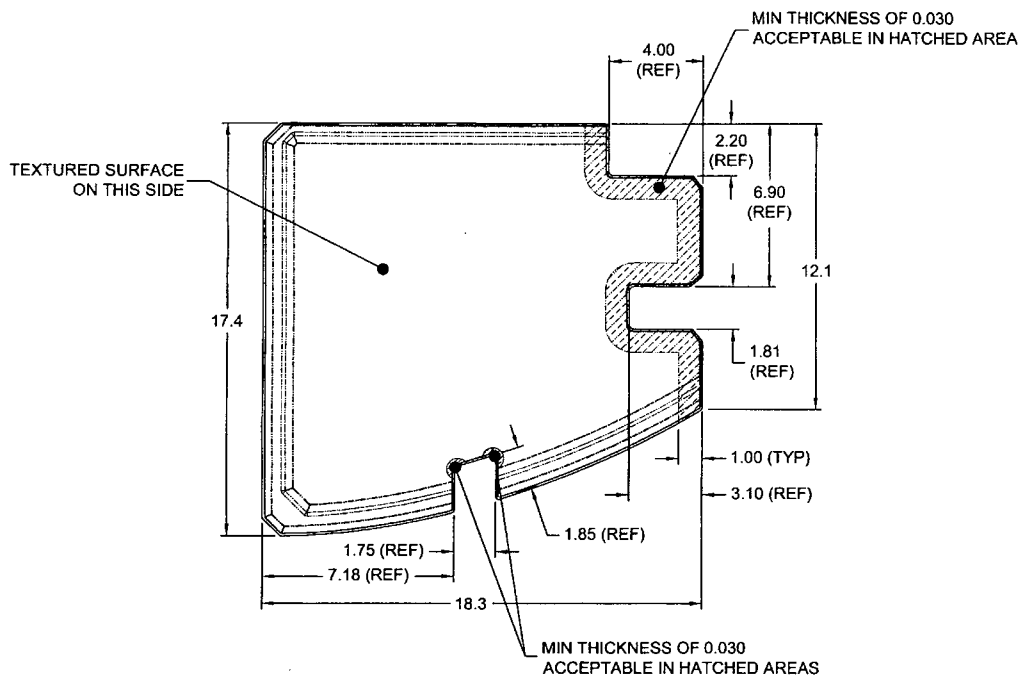
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3281-2 FLOOR PROTECTOR

NOTES:

- 1) MATERIAL: -2L02 = LEXAN F6006, BLACK No. 701, 0.093" THICK (MLEXS.093-F6006-02)
-2L08 = LEXAN 90318 (PROTECT-A-GLAZE), 0.118 THICK, 112-CLEAR (MLEXS.118-90318-08)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.010 MAX
- 6) IDENTIFICATION: IDENT WITH DART P/N "D3281-2Lxx" AND B/N PER QSI 044 6.4 ALONG PERIMETER OF PART AS SHOWN.
- 7) WEIGHT: D3281-2L02 = 0.95 lb D3281-2L08 = 1.13 lb
- 8) THERMOFORM WITH MOLD D3281-2T1 PER DART QSI 022; TRIM AS SHOWN
MINIMUM THICKNESS AFTER FORMING: 0.070" EXCEPT WHERE INDICATED

DESIGN		DART AEROSPACE LTD	
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CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D3281	SHEET 2 OF 4
APPROVED		TITLE	SCALE
DE APPR.		FLOOR PROTECTOR	NTS
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RELEASE
2010-11-25

71919

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

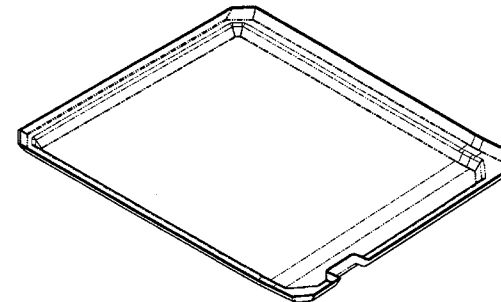
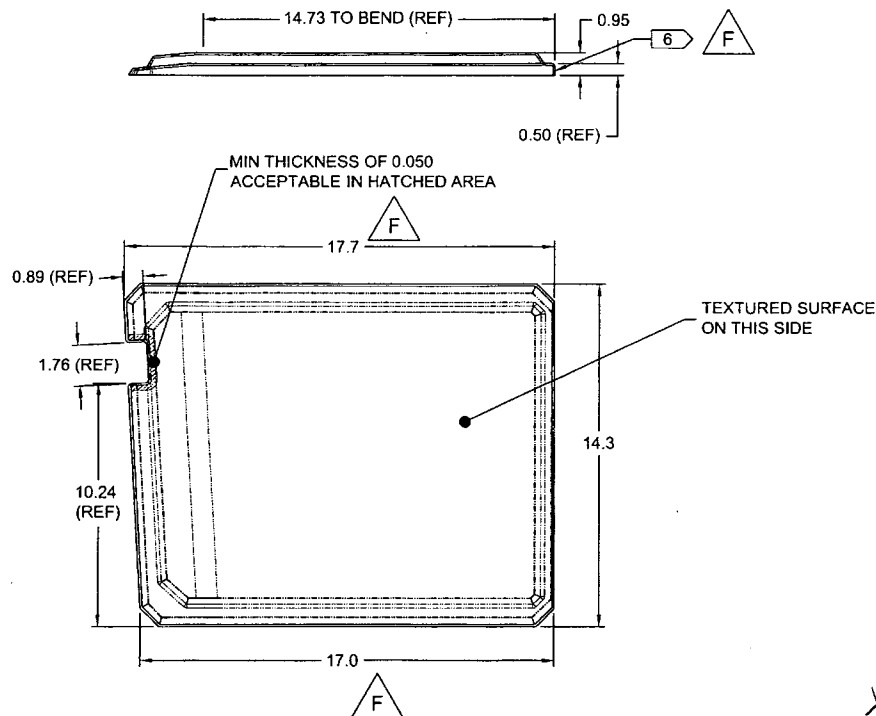
8 7 6 5 4 3 2 1

D

C

B

A



D3281-3 FLOOR PROTECTOR

#7919

RELEASE
2010-11-25

NOTES:

- 1) MATERIAL: -3L02 = LEXAN F6006, BLACK No. 701, 0.093" THICK (MLEXS.093-F6006-02)
-3L08 = LEXAN 90318 (PROTECT-A-GLAZE), 0.118 THICK, 112-CLEAR (MLEXS.118-90318-08)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.010 MAX
- 6) IDENTIFICATION: IDENT WITH DART P/N "D3281-3Lxx" AND B/N PER QSI 044 6.4 ALONG PERIMETER OF PART AS SHOWN.
- 7) WEIGHT: D3281-3L02 = 0.87 lb D3281-3L08 = 1.05 lb
- 8) THERMOFORM WITH MOLD D3281-3T1 PER DART QSI 022; TRIM AS SHOWN
MINIMUM THICKNESS AFTER FORMING: 0.070" EXCEPT WHERE INDICATED

DESIGN		DART AEROSPACE LTD	
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CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D3281	SHEET 3 OF 4
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8 7 6 5 4 3 2 1

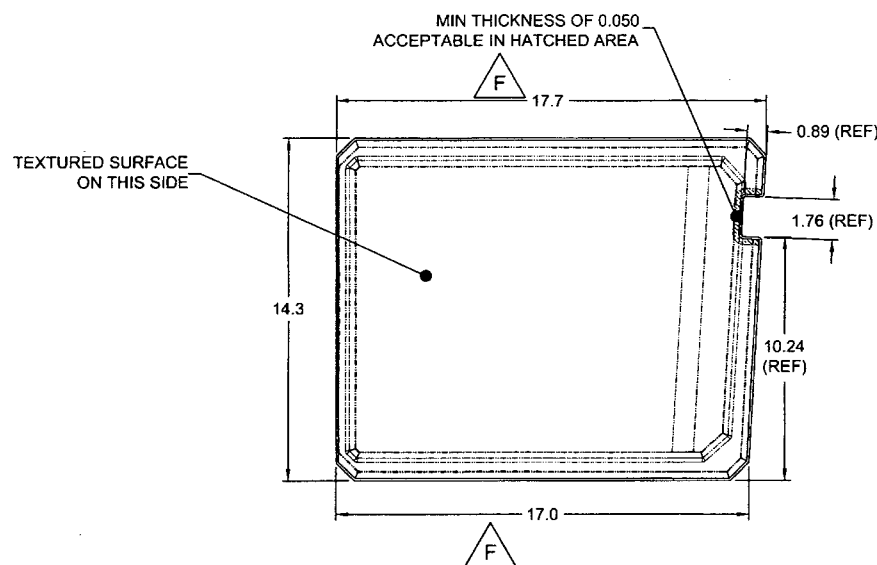
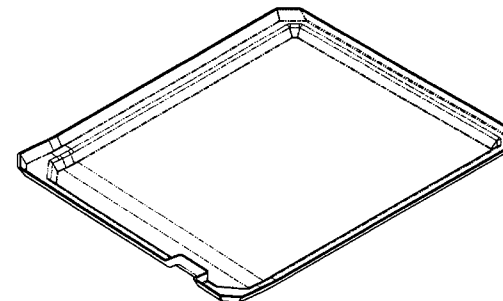
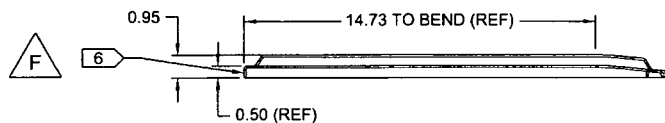
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NOTE: Date & initial all entries



D3281-4 FLOOR PROTECTOR

D3281-4 NOTES:

- 1) MATERIAL: -4L02 = LEXAN F6006, BLACK No. 701, 0.093" THICK (MLEXS.093-F6006-02)
-4L08 = LEXAN 90318 (PROTECT-A-GLAZE), 0.118 THICK, 112-CLEAR (MLEXS.118-90318-08)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.010 MAX
- 6) IDENTIFICATION: IDENT WITH DART P/N "D3281-4Lxx" AND B/N PER QSI 044 6.4 ALONG PERIMETER OF PART AS SHOWN.
- 7) WEIGHT: D3281-4L02 = 0.87 lb D3281-4L08 = 1.05 lb
- 8) THERMOFORM WITH MOLD D3281-4T1 PER DART QSI 022; TRIM AS SHOWN
MINIMUM THICKNESS AFTER FORMING: 0.070" EXCEPT WHERE INDICATED

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2010-11-25

#71919

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